PATENT

IN THE CLAIMS:

Please amend the claims as follows:

- 1. (Currently amended) A method of forming polyolefins, comprising:

 mixing in a first vessel a catalyst slurry comprising a metallocene catalyst and a

 first oil; wherein the first vessel has a catalyst slurry inlet and a catalyst slurry outlet;

 providing a transport medium comprising a second oil;

 combining the transport medium and the catalyst slurry to form a catalyst mixture;

 introducing the catalyst mixture to a polymerization reactor; and

 contacting olefin monomers with the catalyst mixture to polymerize the olefin

 monomers and form polyolefins.
- 2. (Original) The method of claim 1, wherein providing the catalyst slurry includes mixing the catalyst slurry in a first vessel to maintain the metallocene catalyst suspended in the first oil.
- 3. (Previously presented) The method of claim 1, wherein the first vessel includes a housing having an upper portion and a lower portion, the lower portion disposed proximate the catalyst slurry outlet and having a proximal end nearest the catalyst slurry inlet and a distal end nearest the catalyst slurry outlet, the proximal end having a circumference that is greater than the circumference of the distal end.
- 4. (Previously presented) The method of claim 1, wherein the catalyst slurry is passed from the first vessel to a second vessel prior to combining the transport medium and the catalyst slurry, the second vessel having a substantially conical portion and a volume that is smaller than the volume of the first vessel, the method further comprising passing the catalyst mixture through at least one meter configured to measure a catalyst addition rate.

PATENT

- 5. (Original) The method of claim 1, wherein providing the catalyst slurry includes monitoring a catalyst addition rate, the monitoring a catalyst addition rate including disposing the catalyst slurry in a second vessel having a catalyst slurry inlet and a catalyst slurry outlet and measuring the level of catalyst slurry within the second vessel.
- 6. (Original) The method of claim 1, wherein the metallocene catalyst comprises 25 wt% or less of the catalyst slurry mixture.
- 7. (Original) The method of claim 1, wherein the catalyst has an activity of 3500 gPP/(gCat*hr) or more.
- 8. (Original) The method of claim 1, wherein the first oil and the second oil comprise mineral oil.
- 9. (Original) The method of claim 1, wherein the first oil and the second oil each have a kinematic viscosity of from 0.63 centistokes to 200 centistokes at 40°C.
- 10. (Original) The method of claim 1, wherein the catalyst is a supported metallocene catalyst.
- 11. (Previously presented) The method of claim 1, wherein the second oil comprises 10 wt% or more of the combined catalyst mixture.
- 12. (Original) The method of claim 1, wherein the catalyst slurry comprises from 25 wt% to 5 wt% metallocene catalyst and from 75 wt% to 95 wt% first oil.
- 13. (Original) The method of claim 1, wherein the transport medium comprises 85 wt% or more second oil.

PATENT

- 14. (Original) The method of claim 1, wherein the transport medium comprises 95 wt% or more second oil.
- 15. (Original) The method of claim 1, wherein the catalyst mixture comprises from 20 wt% to 80 wt% catalyst slurry and from 80 wt% to 20 wt% transport medium.
- 16. (Original) The method of claim 1, wherein combining the transport medium and the catalyst slurry to form a catalyst mixture provides a catalyst mixture with a lower viscosity than the viscosity of the catalyst slurry.
- 17. (Original) The method of claim 1, wherein the olefin monomers comprise propylene.
- 18. (Original) A method of forming polypropylene, comprising:

propylene monomers and form polypropylene.

providing a catalyst slurry consisting essentially of a metallocene catalyst and a first mineral oil having a kinematic viscosity of from about 0.63 centistokes to 200 centistokes at 40°C;

providing a transport medium consisting essentially of a second mineral oil; combining the transport medium and the catalyst slurry to form a catalyst mixture; introducing the catalyst mixture to a polymerization reactor; and contacting propylene monomers with the catalyst mixture to polymerize the

- 19. (Original) The method of claim 1 or 18, wherein the catalyst mixture comprises from 10 wt% to 90wt % catalyst slurry and from 90 wt% to 10 wt% transport medium.
- 20. (Original) The method of claim 18, wherein the catalyst mixture comprises from 20 wt% to 80 wt% catalyst slurry and from 80 wt% to 20 wt% transport medium.